

Application No.: 10/821,805

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Docket No.: 58418CIP(48497)

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CENTRAL FAX CENTER**Listing of the Claims:**

This listing of claims will replace all prior listings:

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1. (Currently Amended) A PNA probe comprising a nucleobase sequence for the detection, identification and/or quantitation of *Pseudomonas* (~~sensu stricto~~), wherein said PNA probe comprises a sequence of 10 – 17 nucleobase subunits in length, and wherein said PNA probe being complementary is complementary to a target sequence of 23S rRNA or rDNA of all the species of the genus *Pseudomonas*, except for *Pseudomonas pertucinogena*, selected from *Pseudomonas aeruginosa*, *Pseudomonas alcaligenes*, *Pseudomonas chlororaphis*, *Pseudomonas fluorescens*, *Pseudomonas fragi*, *Pseudomonas huttiensis*, *Pseudomonas luteola*, *Pseudomonas mendocina*, *Pseudomonas mucidolens*, *Pseudomonas nitroreducens*, *Pseudomonas pseudoalcaligenes*, *Pseudomonas putida*, *Pseudomonas stutzeri*, or *Pseudomonas veronii*, or sequences complementary to these target sequences of 23S rRNA or rDNA.

2. (Previously Presented) The PNA probe of claim 1, wherein at least a portion of the probe is at least 90% identical to the nucleobase sequence or complement thereof selected from the following sequence: CCT ACC ACC TTA AAC (Seq. Id. No. 1).

3. (Cancelled)

4. (Currently Amended) The PNA probe of claim 1 for the detection, identification and/or quantification of *Pseudomonas* (~~sensu stricto~~) comprising the following probe sequence: CCT ACC ACC TTA AAC (Seq. Id. No. 1), the complement and/or variations thereof.

5. (Original) The PNA probe of claim 1, wherein the probe is labeled with at least one detectable moiety.

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6. (Original) The PNA probe of claim 5, wherein the detectable moiety or moieties are selected from the group consisting of: a conjugate, a branched detection system, a chromophore, a fluorophore, a spin label, a radioisotope, an enzyme, a hapten, an acridinium ester and a luminescent compound.

7. (Original) The PNA probe of claim 5, wherein the probe is self-reporting.

8. (Previously Presented) The PNA probe of claim 7, wherein the probe comprises a PNA Linear Beacon.

9. (Original) The PNA probe of claim 1, wherein the probe is unlabeled.

10. (Original) The PNA probe of claim 1, wherein the probe is bound to a support.

11. (Previously Presented) The PNA probe of claim 1, wherein the probe further comprises a spacer or a linker.

12. (Currently Amended) The PNA probe of claim 1, wherein the PNA probe is used in in situ hybridization is used for analysis of Pseudomonas(sensu stricto).

13. -24 (Canceled)

25. (Currently Amended) A kit ~~adapted to perform an assay~~ for the detection, identification ~~and/or~~ quantitation of Pseudomonas aeruginosa, Pseudomonas alcaligenes, Pseudomonas chlororaphis, Pseudomonas fluorescens, Pseudomonas fragi, Pseudomonas huttiensis, Pseudomonas luteola, Pseudomonas mendocina, Pseudomonas mucidolens, Pseudomonas nitroreducens, Pseudomonas pseudoalcaligenes, Pseudomonas putida, Pseudomonas stutzeri, or Pseudomonas veronii Pseudomonas

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~~(sensu stricto)~~ in a sample, wherein said kit comprises: a) a PNA probe according to claim 1 and b) ~~other reagents or compositions necessary to perform the assay~~ directions for using the kit.

26. (Currently Amended) The kit of claim 25, wherein the kit is used to detect, identify or quantitate *Pseudomonas* ~~(sensu stricto)~~ and at least one other microorganism optionally present in a sample ~~are independently detected, identified and/or quantitated.~~

27. (Currently Amended) The kit of claim 25, wherein the kit is used to determine the susceptibility of *Pseudomonas* ~~(sensu stricto)~~ to antimicrobial agents ~~optionally present in a sample is detected, identified and/or quantitated and its susceptibility to antimicrobial agents is determined.~~

28. (Currently Amended) The kit of claim 25, wherein the PNA probe kit is used ~~to perform~~ in an in-situ hybridization assay.

29. (Currently Amended) The kit of claim 25, wherein the PNA probe kit is used ~~to perform~~ in a real-time PCR assay.

30. (Currently Amended) The kit of claim 25, wherein the PNA probe kit is used to examine clinical samples such as clinical specimens or cultures thereof.

31. (Previously Presented) The kit of claim 25, wherein the kit is used to examine food, beverages, water, pharmaceutical products, personal care products, dairy products or environmental samples or cultures thereof.

32. (Cancelled)

33. (Cancelled)

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34. (New) A PNA probe comprising a nucleobase sequence for the detection, identification or quantitation of *Pseudomonas* wherein said PNA probe comprises a sequence of 10 – 17 nucleobase subunits in length, and wherein said PNA probe is complementary to a target sequence of 23S rRNA or rDNA of *Pseudomonas aeruginosa*, *Pseudomonas alcaligenes*, *Pseudomonas chlororaphis*, *Pseudomonas fluorescens*, *Pseudomonas fragi*, *Pseudomonas huttiensis*, *Pseudomonas luteola*, *Pseudomonas mendocina*, *Pseudomonas mucidolens*, *Pseudomonas nitroreducens*, *Pseudomonas pseudoalcaligenes*, *Pseudomonas putida*, *Pseudomonas stutzeri*, and *Pseudomonas veronii*, or sequences complementary to these target sequences.

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